



JHR

JOURNAL OF HEALTH AND RELIGION



Description of Nutritional Status in Elementary School Children of 060930 Elementary School in Medan City 2024

Nelsih Adelia¹, Nazwa Ayudhia Ghani D², Viona Pili Anggita³, Deswita Siviani⁴, Ayu Sukma Putri⁵
Mangun Angkat⁶

^{1,2,3,4,5}Fakultas Kesehatan Masyarakat, Universitas Islam Negeri Sumatera Utara Medan

⁶Universitas Prima Indonesia

*Corresponding Author: nelsihadelia@gmail.com

Article Info

Article history:

Received : 15 Mei 2024

Acceptance : 20 Juni 2024

Published : 29 Juli 2024

Available online

<http://aspublisher.co.id/index.php/jhr>

E-ISSN: xxxx-xxxx

How to cite:

Adelia, N., D, N. A. G., Anggita, V. P., Siviani, D., Putri, A. S., & Angkat, M. (2024). Description of Nutritional Status in Elementary School Children of 060930 Elementary School in Medan City 2024. *Journal of Health and Religion*, 1(3), 114–124.



This is an open access article under the [CC BY-SA](https://creativecommons.org/licenses/by-sa/4.0/) license

ABSTRACT

The nutritional status of primary school students is still a very serious problem because it will continue into adulthood and have a negative impact on future health. Problems that often arise are underweight and overnutrition or obesity which will have a major impact on the life process of child growth and development. The purpose of this study was to determine the nutritional status of students in grades III and IV, State Elementary School 060930 Medan Johor 2024. This type of research is descriptive, to determine the description of nutritional status in students of State Elementary School 060930. The population in this study were all students at State Elementary School 060930 Medan Johor in 2024 as many as 50 students. Data collection techniques using random sampling techniques. Data analysis used in this study is Univariate analysis. The results showed the nutritional status of students with a percentage of 78% in the underweight category. Based on the age characteristics of students at State Elementary School 060930 Medan Johor who were respondents in this study, namely 50 respondents consisting of classes III and IV from the age of 9 years to the age of 10 years based on BMI standards showed an average of 15.04 which was in the underweight category. Based on the tabulation of the nutritional status of students at the 060930 Medan Johor State Elementary School, most of the 39 respondents were in the underweight category. Suggestions in this study are that schools are expected to routinely carry out cooperation with the puskesmas regarding the application of good nutrition to improve and help children's development, for parents to pay attention to children in order to increase nutritional intake and manage time with a balance between physical activity, learning and rest and for students who are obese should reduce consumption of foods that are high in saturated fat and regulate diet properly according to calorie needs.

Keywords: *Nutritional Status, Elementary School*

ABSTRAK

Status gizi anak sekolah dasar masih menjadi masalah yang sangat serius karena akan terus berlanjut hingga dewasa dan berdampak buruk bagi kesehatan di masa depan. Masalah yang sering muncul adalah gizi kurang dan gizi lebih atau obesitas yang akan berdampak besar pada proses kehidupan tumbuh kembang anak. Tujuan penelitian ini adalah untuk mengetahui status gizi murid kelas III dan IV Sekolah Dasar Negeri 060930 Medan Johor Tahun 2024. Jenis penelitian ini adalah deskriptif, untuk mengetahui gambaran status gizi pada siswa Sekolah Dasar Negeri 060930. Populasi dalam penelitian ini adalah seluruh siswa di Sekolah Dasar Negeri 060930 Medan Johor tahun 2024 sebanyak 50 orang siswa. Teknik pengumpulan data menggunakan teknik random sampling. Analisis data yang digunakan dalam penelitian ini adalah analisis Univariat. Hasil penelitian menunjukkan status gizi siswa dengan persentase 78% berada pada kategori kurus. Berdasarkan karakteristik umur murid di Sekolah Dasar Negeri 060930 Medan Johor yang menjadi responden dalam penelitian ini yaitu 50 responden yang terdiri dari kelas III dan IV dari usia 9 tahun sampai dengan usia 10 tahun berdasarkan standar IMT menunjukkan rata-rata 15,04 yang berada pada kategori kurus. Berdasarkan tabulasi status gizi murid Sekolah Dasar Negeri 060930 Medan Johor, sebagian besar yaitu 39 responden berada pada kategori kurus. Saran dalam penelitian ini adalah sekolah diharapkan rutin melakukan kerjasama dengan pihak puskesmas mengenai penerapan gizi yang baik untuk meningkatkan dan membantu tumbuh kembang anak, bagi orang tua agar memperhatikan anak agar dapat meningkatkan asupan gizi dan mengatur waktu dengan seimbang antara aktivitas fisik, belajar dan istirahat serta bagi siswa yang mengalami obesitas sebaiknya mengurangi konsumsi makanan yang mengandung lemak jenuh yang tinggi dan mengatur pola makan dengan baik sesuai dengan kebutuhan kalori.

Kata kunci: Status Gizi, Sekolah Dasar

1. PENDAHULUAN

Primary school children are those aged between 6 - 12 years old or commonly referred to as the intellectual period. Children's knowledge increases rapidly as they get older, and the skills they master become more diverse. The implication is that children tend to do a variety of activities that will be useful in their future development. The status of nutritional status of elementary school children needs attention because during this period children experience weight gain as well as height. The fulfillment of nutrients must be sufficient to support optimal growth and development (Zuhriyah & Indrawati, 2021).

School-age children are the nation's investment because they are the next generation who will continue the quality of the nation in the future. At the age of 6-12 years old, they are categorized as primary school-age children. Optimal growth and development of

school-age children is influenced, among others, by the amount and quality of nutrient intake provided in their diet. School-age children grow at their own genetic pace, with differences in height already beginning to appear. Some children appear relatively shorter or taller. Children in the school age group of 6-12 years spend most of their day outside the home, including play and sports. Resting times during play and sports are usually used to consume food in order to fulfill their energy and nutrient needs (Sinaga, 2017).

Nutrient Requirement is the minimum amount of energy and nutrients required by each individual to maintain their health. The recommended RDAs are based on body weight benchmarks for each age group, gender, and physical activity. Based on the 2013 RDA, the energy adequacy for school children is between 1850 - 2100 kcal. In its use, if the group of school children encountered has an average body weight that is different from the benchmark used, then an adjustment or correction for body weight is required. At this school age, children will do a lot of physical and mental activities, such as: playing, learning, exercising, etc. The nutrients provided to them will help in improving the health of the child's body so that their body's defense system is well developed or not susceptible to disease. School-age children need more energy and nutrients than toddlers. Additional energy, protein, calcium, fluorine, iron are also needed because growth in this age range is rapid and children's activities are increasing. To fulfill their energy and nutrient needs, children sometimes eat up to 5 times a day. However, children should still be taught to eat 3 meals a day with a high nutritional menu, namely: breakfast, lunch and dinner. Children also need to be taught to eat breakfast so that they can think well at school (Pritasari et al, 2017).

UNICEF in July 2023 attached data that child malnutrition is still very high. By 2021, 22.3% (148.1 million) of children will be stunted, 6.8% (45 million) will be wasted, and 5.6% (37 million) will be overweight. Based on the results of Riskesdas 2018, the prevalence of nutritional status (IMT/U) in Indonesian children aged 5-12 years, including very thin as much as 2.4%, thin 6.8%, fat 10.6%, and overweight 6.8%. 6.8%, fat 10.8%, and obese 9.2%. According to data from the Indonesian Ministry of Health (2018), the nutritional status of primary school-age children (aged 5-12 years) in Indonesia based on height and weight is still quite a lot below the standard. In the primary school age group, 6.7% of children are classified as very short, 16.9% are classified as short. This short and very short status tends to be higher among children in rural areas. Based on the nutritional status of children according to Body Mass Index (BMI), 2.4% were classified as very thin,

6.8% as thin, 9.2% as obese. Obesity tends to be higher among children in urban areas. If this problem continues into adulthood, the fetus will experience health problems, so that the generational chain of nutritional problems does not stop. Based on the results of preliminary studies that have been carried out at the State Elementary School 060930 Medan Johor, by measuring the height and weight of students in grades III and IV at the State Elementary School 060930 totaling 248 students, the author took a survey with a lot of 50 respondents, and obtained the results that there were 29 students with a percentage of 78% experiencing Underweight nutrition, and there were 10 students with a percentage of 20% having Normal nutrition and there were only 1 student with a percentage of 20% having Normal nutrition. Normal and there is only 1 student who is Obese with a percentage of 2%.

From direct observation at the State Elementary School 060930 Medan Johor, the average female students have a disproportionate body have a disproportionate body, with a portion of the body that is tall and short but have less weight or thin. During the break time, many students who spend time playing, running, etc., and forget about their lunch hour, and there are some students who spend their time playing and running. And there were some students who took advantage of their break time by eating eating the food available in the school canteen. But it can be seen from the canteen at Sekolah Dasar Negeri 060930 that provides less nutritious food, which can cause malnutrition if consumed regularly, cause malnutrition if consumed continuously by students. The food provided such as frozen food, packaged drinks, instant noodles, snacks with lots of flavoring, flavoring. This is also motivated by the lack of knowledge of students at Primary School Negeri 060930 about the nutritional needs of children of their age. Lack of attention from parents to children's early growth and development that will have a sustainable impact, such as not bringing lunch, drinking bottles, and healthy snacks. Lack of family knowledge about nutrition can lead to nutritional disorders in children, so parents' knowledge about nutrition is key to the success of good for bad status in children (Sawitri, 2023).

Physical activity is one of the factors that affect children's nutritional status. A healthy child is an active child. However, it should also be noted that physical activity for children must be as needed and in accordance with their body development. Children with high physical activity must be balanced with adequate nutritional intake. The mismatch

between intake and calories needed will cause poor nutritional status in children (Suhartatik. et. al., 2022).

The health of school-age children and adolescents today determines the health status of the nation's future generations. We need to prepare them to become quality human resources, one of which is through health education so that they are able to avoid themselves from problems that can adversely affect their health through health behaviors from problems that can adversely affect health through clean and healthy living behavior (Rachmi et al., 2019).

The nutritional status of primary school students is still a very serious problem as it will continue into adulthood and have a negative impact on future health. This is of course inseparable from student knowledge, student physical activity, and student eating and snacking habits. Because if this goes well, it can affect nutritional improvement activities which in turn can affect child growth and development which in turn can affect child health conditions and especially child health, which in turn can affect children's health conditions and especially nutritional status (Wicaksana & Nurrizka, 2019). Based on the above background, researchers are interested in identifying the nutritional status of pre-adolescent children with the aim of identifying the nutritional status of children in the pre-adolescent group. with the aim of describing the nutritional status in the pre-teen age group.

2. METODE

This study used descriptive research, with the aim of knowing the description of nutritional status in children aged 6-12 years at State Elementary School 060930, Medan Johor in 2024. The research was conducted at Sekolah Dasar Negeri 060930, on May 25, 2024. The sample in this study were students at State Elementary School 060930, grade III and IV, as many as 50 students. Data analysis used in this study is univariate analysis and bivariate analysis.

3. HASIL DAN PEMBAHASAN

This chapter will present the results of research that has been carried out at Public Elementary School 060930, with 50 respondents, and using univariate analysis which will be described in the form of a frequency distribution table as follows:

Table 4.1. Frequency Distribution of Respondents Based on Age of Elementary School Children at SDN 060930 Medan Kota Year 2024.

No.	Class	Average Age (Years)	Number Of Students	Percentage	Average IMT
1.	III	9	26	52%	15,78
2.	IV	10	24	48%	16,2
	Total		50	100%	15,78

From table 4.1 above, it can be seen that out of 50 respondents consisting of classes III and IV from the age of 9 years to the age of 10 years have an average BMI standard of 15.78 (Underweight

Table 4.2. Frequency Distribution of Respondents Based on Age of Elementary School Children at SDN 060930 Medan Kota Year 2024.

No.	Nutritional Status	Frequency (people)	Percentage (%)	IMT
1.	Underweight	39	78%	15,04
2.	Normal	10	20%	18,3
3.	Overweight	0	0	0
4.	Obesitas	1	2%	29,7
	Total	50	100%	15,4

From table 4.2, it can be seen that of the 50 respondents, the majority were underweight, namely 39 people with a percentage of 78% and a BMI standard of 15.04%.

Table 4.3. Nutritional Status Based on Age of Elementary School Children of SDN 060930 Medan Kota Year 2024.

No.	Class	Age(Years)	Thin	%	Normal	%	Fat	%	Obesity	%	Total
1.	III	9	19	73	7	26,9	0	0	0	0	26
2.	IV	10	20	83,3	3	12,5	0	0	1	4,1	24
	Total		39		10		0	0	1		50

From table 4.3 above, it can be seen that of all 50 respondents, that in class III with an average age of 9 years, totaling 26 respondents, 19 people with a percentage of 73% were in the thin category, 7 people with a percentage of 26.9% were in the normal category, and no one experienced the category of fat and obesity. In class IV with an average age of 10 years old totaling 24 respondents, there were 20 people with a percentage of 83.3% in the thin category, 3 people with a percentage of 12.5% in the normal category, and 1 person with a percentage of 4.1% for the obese category in class IV.

The results of this study indicate that the average age of students of SDN 060930 Medan included in school-age children. The ages of the students at SDN 060930 Medan range from 8 to 10 years old. This is in accordance with the definition of school-age children, namely

children who are entering the age of 7-15 years according to the World Health Organization. Based on Nutritional Status based on IMT/U BB and TB in Law No. 2 of 2020 concerning Child Anthropometry Standards can be used to assess nutritional status with BMI. IMT is a parameter for assessing nutritional status in a more structured manner. The source of the Ministry of Health of the Republic of Indonesia (2010) says IMT recommended as a good indicator to determine the nutritional status of adolescents, weight and TB can be used to assess nutritional status with age-related BMI, because with age comes changes in body composition. This study uses IMT parameters to describe the nutritional status of school-age children, falling into the category of underweight. (underweight).

The results of this study show that adolescents who are thin are 78%, normal by 20%, and obese by 2%. These results indicate that school-age children in School-age children at SDN 060930 Medan City with a percentage of 78% in the underweight category. category, this is based on the results of calculations and research conducted at SDN 060930 Medan with the number of respondents. 060930 Medan with a total of 50 respondents divided from class III and IV. in class III with an average age of 9 years totaling 26 people have a standard (BMI) of 15.78 (included in the underweight category), while class IV with an average age of 10 years has a standard (BMI) of 15.78 (included in the underweight category). years amounted to 24 students having a standard (BMI) of 16.2% (included in the normal).

Anthropometry is a science that studies the morphology and various sizes of the human body (Gustian et al., 2020). (Gustian et al., 2020). Anthropometric measurements are a series of quantitative measurements of muscle, bone, and adipose tissue used to assess body composition. The core elements of anthropometry are height, weight, body mass index (BMI), body circumference (waist, hips, and waist circumference), and body mass index (BMI). (waist, hips, and legs), and skinfold thickness (Casadei & Kiel, 2020).

Conventional anthropometric measurements are still often carried out and are the main choice. because it is easy to do and non-invasive. In addition, conventional anthropometric measurements anthropometric measurements are also still the gold standard for assessing nutritional status in toddlers and children. children. But on the other hand, conventional anthropometric measurements are often biased due to human error. biased due to human error, which causes errors in measurement and data collection. measurement and data collection. (Ratumanan, Achadiyani and Khairani, 2023)

Child growth assessment should be done periodically at least once a month. In PMK Number 2 of 2020 concerning Child Anthropometry Standards, it is stated to evaluate

children's growth, the growth standard of body weight according to age (BB/U) is used, body length/height according to age (PB/U or TB/U), body weight according to height (BB/TB) and child growth index (BMI). (BB/TB) and body mass index according to age (IMT/U). Things that must be known in this case are the child's age, sex, and the results of weight and length/height measurements.

Nutrient fulfillment plays an important role for school-age children because the adequacy of nutrients can support the achievement of the potential of school-age children in the form of growth, development, and health. nutrition can support the achievement of the potential of school-age children in the form of growth, development, and health status (Kushargina & Dainy, 2021). and health status (Kushargina & Dainy, 2021). Nutrients must be consumed appropriately and as needed in order to function in the body. The function of nutrients from food consumed consumed is a source of energy, as a substance for building and maintaining cells and tissues of the body (Santoso & Wahjuni, 2021).

Nutritional status can affect nutritional problems and nutritional problems can occur in all age groups (Muchtar et al., 2022). Excess intake can lead to overnutrition and lack of food intake leads to malnutrition which results in a body that looks thin and is at risk of disease (Amalia & Putri, 2022). In obese school-age children, school-age children are obese is caused by a variety of factors, including environmental factors, genetics, diet, physical inactivity and lifestyle changes. physical activity, and lifestyle changes. Environmental factors that occur through an imbalance between diet, eating behavior, physical activity, and lifestyle changes can influence the development of obesity in children. can influence the development of childhood obesity. Genetic factors, unbalanced diet lack of physical activity, and psychological, family, socioeconomic, and psychosocial factors can also influence the development of obesity in children. psychosocial factors can also affect the occurrence of obesity in children (Riri, no year). Underweight or underweight in school-age children can be caused by various factors, both physiological and psychological.

The most common physiological factor is lack of food intake. This can be caused by a variety of reasons, such as poor appetite, unhealthy diet, or limited access to nutritious food. It can also be caused by infection. Chronic infections such as tuberculosis or intestinal worms can interfere with nutrient absorption and cause weight loss. and Some medical conditions, such as celiac disease, diabetes, or thyroid disease that can cause weight loss. While from psychological factors can be caused by stress or eating disorders such as anorexia nervosa and bulimia nervosa can lead to significant weight loss and jeopardize health. jeopardize health.

The incidence of undernutrition in school children can also be caused by errors in management that focus on treatment and rehabilitation of undernourished focus on treatment and rehabilitation of undernourished patients rather than preventive efforts against wasting.

This is because undernutrition is only considered a health problem after being in the category of severe undernutrition (Astuti & Sulisty, 2011). Based on the cross tabulation of nutritional status in school-age children at SDN 060930 Medan. most of them showed as many as 39 respondents were in the underweight category which which is the highest value in school-age children and as many as 1 respondent in the obese category which is the lowest value in school-age children. School-age children is a group of children aged between 7-12 years, and a quiet period or latent period, so that what happens to them now will continue for the future (Dian Putri, 2020 in (Dian Putri, 2020 in Purba, 2022), because this period is a process of maturation of the physical, social, and maturation of physical, social, and psychological characteristics, increasingly independent when participating in activities outside the home, especially at school. activities outside the home, especially at school (Aman et al., 2020). Achieving optimal nutritional status optimal nutritional status is determined by balanced food intake, which is according to the needs of the body and this condition will support growth and development, productivity, and health. This will support growth and development, productivity and health status (Septiawati et al., 2020).

4. KESIMPULAN

Based on the age characteristics of students at State Elementary School 060930 Medan Johor who were respondents in this study, namely as many as 50 respondents, consisting of classes III and IV from the age of 9 to 10 years based on BMI standards showed an average of 15.04% who fell into the underweight category. Based on the nutritional status of students at State Elementary School 060930 Medan Johor, the majority are underweight or underweight, as many as 39 people with a percentage of 78% and a BMI standard of 15.04%. Based on the tabulation of nutritional status in students of State Elementary School 060930 Medan Johor, most of the 39 respondents were in the underweight category which was the highest value in students, as many as 10 respondents were in the normal category, and 1 respondent was in the obese category in students of State Elementary School 060930 Medan Johor.

5. DAFTAR PUSTAKA

- Amalia, J. O., & Putri, T. A. 2022. Edukasi Gizi Seimbang pada Anak-anak di Desa Bawuran Kecamatan Pleret, Kabupaten Bantul. *Jurnal PASOPATI*, 4(1), 65–70.
- Aman, Y., Sd, D. I., & Palembang, M. 2020. 1, 2, 3. 2(2), 1–8.
- Astuti, F. D., & Sulistyowati, T. F. 2013. Hubungan Tingkat Pendidikan Ibu dan Tingkat Pendapatan Keluarga dengan Status Gizi Anak Prasekolah dan Sekolah Dasar Di Kecamatan Godean. *Jurnal Kesehatan Masyarakat (Journal of Public Health)*, 7(1), 15–20. <http://journal.uad.ac.id/index.php/KesMas/article/view/1237> Balitbangkes. (2013).
- Banjarnahor., et.al. Tanpa Tahun. Faktor-faktor risiko penyebab kelebihan berat badan dan obesitas pada anak dan remaja: Studi literatur. *TROPHICO: Tropical Public Health Journal Faculty of Public Health, USU*. Hal 35-45
- Casadei, K., & Kiel, J. 2020. Anthropometric measurement. *StatPearls* [Internet].
- Gustian, D., Lestari, B., Rejeki, N. S., & Zasmine, N. M. 2020. Fuzzy Inference System in Determining Nutritional Status of Toddlers. 2020 6th International Conference on Computing Engineering and Design (ICCED), 1–6.
- Kemkes RI. 2020. Peraturan Menteri Kesehatan RI Nomor 2 Tahun 2020 tentang Standar Antropometri Anak. Jakarta: Kementerian Kesehatan RI. <http://hukor.kemkes.go.id/uploads/produk hukum/PMK No 2 Th 2020 ttg Standar Antropometri Anak.pdf>
- Kesehatan Kemkes RI. (2019). Laporan Nasional RISKESDAS 2018. Jakarta : Lembaga Penerbit BALITBANGKES
- Kushargina, R., & Dainy, N. C. 2021. Studi Cross-Sectional: Hubungan Lokasi Sekolah (Pedesaan dan Perkotaan) dengan Status Gizi Murid Sekolah Dasar. *JRG: Jurnal Riset Gizi*, 9(1), 33–37.
- Muchtar, F., Effendy, D. S., Lestari, H., & Bahar, H. 2022. Pengukuran status gizi remaja putri sebagai upaya pencegahan masalah gizi di Desa Mekar Kecamatan Soropia Kabupaten Konawe. *Abdi Masyarakat*, 4(1), 43–48.
- Pritasari, et al. 2017. Gizi Dalam Daur Kehidupan. Jakarta: Kementerian Kesehatan RI
- Purba, A. Y., et. al. 2022. GAMBARAN PERILAKU ANAK USIA SEKOLAH DALAM JAJAN SEMBARANGAN DI DESA KUTA GUGUNG KEC. NAMAN TERAN KAB. KARO SUMATERA UTARA TAHUN 2021. *Jurnal Sahabat Keperawatan*. Hal 80-81
- Rachmi, N, C, et al. 2019. *Aksi Bergizi Hidup Sehat Sejak Sekarang Untuk Remaja Kekinian. Jakarta Selatan*: Kementerian Kesehatan RI
- Ratumanan, S. P., Achadiyani, A., Khairani, A. F., 2023. Metode Antropometri Untuk Menilai Status Gizi : Sebuah Studi Literatur. *HIJP : Health Information Jurnal Penelitian*
- Santoso, R. D., & Wahjuni, E. S. 2022. Survei Status Gizi Siswa Kelas II SD Negeri Se-Kecamatan Labang. *Jurnal Pendidikan Olahraga Dan Kesehatan*, 10(1), 191–197.
- Sawitri, E. et.al. 2023. GAMBARAN STATUS GIZI PADA ANAK USIA PRA SEKOLAH DI TK PERTIWI TANGKIL. *Triage Jurnal Ilmu Keperawatan* Vol. 10, No.1 (30–36).
- Septiawati, D., Indriani, Y., & Zuraida, R. 2021. Tingkat Konsumsi Energi dan Protein dengan Status Gizi Balita. *Jurnal Ilmiah Kesehatan Sandi Husada*, 10(2), 598–604.
- Sinaga, E 2017. *Manajemen Kesehatan Menstruasi*. Jakarta: Iwwash
- Suhartatik, et al. 2022. *Panduan Gizi Sehat Untuk Anak Usia Sekolah Dasar*. Surakarta: Cv Indotama Solo
- UNICEF, Keadaan Ketahanan Pangan dan Gizi Juli, 2023.

UU No 2 Tahun 2020 tentang Standar Antropometri Anak

Wicaksana, D.A. & Nurrizka, R.H. 2019. Faktor-Faktor yang Berhubungan dengan Status Gizi pada Anak Usia Sekolah di SDN Bedahan 02 Cibinong Kabupaten Bogor Tahun 2018. *Jurnal Ilmiah Kesehatan Masyarakat*, 11(1), Hal 35 - 48

Zuhriyah, A., & Indrawati, V. (2021). Konsumsi Energi, Protein, Aktivitas Fisik, Pengetahuan Gizi dengan Status Gizi Siswa SDN Dukuhsari Kabupaten Sidoarjo. *Jurnal Gizi Universitas Negeri Surabaya*, 1(1), 45-52.